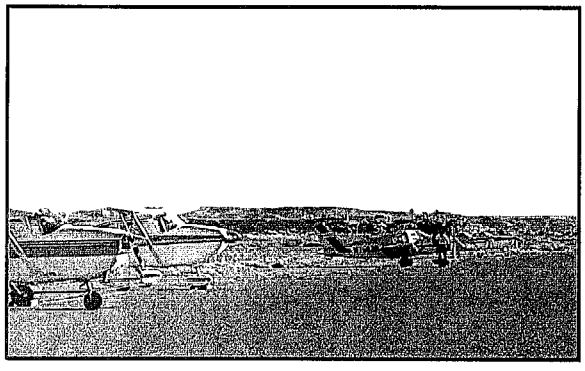
Chapter Five
AIRPORT PLANS

AIRPORT LAYOUT PLANS



The airport master planning process has evolved through several analytical efforts in the previous chapters intended to analyze future aviation demand, establish airside and landside facility needs, and evaluate options for the future development of the airside and landside facilities. The planning process, thus far, has included the presentation of four working papers (representing the first four chapters of the master plan) to the Planning Advisory Committee and the Mohave County Airport Authority staff. The master plan concept has evolved, with the input from these individuals, into the following set of drawings. These drawings will be subsequently refined into final layout drawings which will represent the extent of future improvements at the airport for the long range planning period.

AIRPORT DESIGN STANDARDS

As a commercial service airport, the Laughlin/Bullhead International Airport (IFP) must comply with FAA design and safety standards. Advisory Circular 150/5300-13, Airport Design, is the primary reference used to ensure compliance with these standards. These design and safety standards are based primarily upon the characteristics of the aircraft that are expected to use the airport on a regular basis. As previously discussed in Chapter Three, the design codes are based upon the approach speeds and wingspans of these "critical" aircraft. Frequently, as in the case at Laughlin/Bullhead International Airport, more than one aircraft makes up the design aircraft. In addition, the existing and future runways are not

planned to the same standard. In this situation, Runway 16-34 will be designed to D-IV standards, while Runway 16R-34L will be planned to B-II standards. Since a number of design standards are affected by these classifications, a summary of the runway and taxiway standards (as they will be applied to the airfield) has been provided in **Table 5A**. It is possible that some areas on the airfield (such as T-hangar storage areas) may be designed to a lesser Group I standard, requiring less set-back requirements. This has been noted in the table, under the taxiway and taxilane design standards.

RECOMMENDED MASTER PLAN CONCEPT

The recommended master plan concept provides for anticipated facility needs over the next twenty years, while ensuring a viable aviation facility for the Laughlin/Bullhead area well beyond this period. The following paragraphs summarize the airside and landside recommendations.

AIRSIDE RECOMMENDATIONS

The airside recommendations include improvements to the runways, taxiways, instrumentation, and airfield lighting.

- Install AWOS-3 (automated weather observing system) to provide real-time measurements of atmospheric conditions to pilots using the airport.
- Relocate ARFF building to midfield and provide for additional equipment and staff living and office space.
- Acquire property for future runway development. This includes approximately 41 acres for the extension of Runway 16-34 to the south, and approximately 47 acres for the construction of parallel Runway 16R-34L on the west side of the airfield.
- Extend Runway 16-34 as associated parallel Taxiway A, 1,500 feet south to a length of 9,000 feet to accommodate longer haul flights in the future.
- Establish Category I instrument minimums from the south on Runway 34 using a DGPS (differential global positioning system).
- Install HIRL (high intensity runway lighting) on Runway 16-34 to supplement the Category I approach
- Install MALSR (medium intensity approach light system with runway alignment indicator lights) on Runway 34 approach also to supplement the Category I system.
- Add high speed exits to Runway 16-34 as traffic increases to improve runway use efficiency.
- Construct a helipad between the air carrier and general aviation ramps.

TABLE 5A
Runway Design Standards
Laughlin/Bullhead International Airport

	Runway 16-34		Runway16R-34L	
Airport Reference Code	D-IV		B-II	
Approach Visibility Minimums	Mile/Half-Mile		Mile	
Runway				
Width (ft.)	150		75	
Runway Safety Area (RSA)				
Width (centered on runway centerline) (ft.)	500		150	
Length Beyond Runway End (ft.)	1,000		300	
Object Free Area (OFA)				
Width (ft.)	800		500	
Length Beyond Runway End (ft.)	1,000		300	
Obstacle Free Zone (OFZ)				
Width (ft.)	400		400	
Length Beyond Runway End (ft.)	200		200	
Runway Centerline to:				
Parallel Runway Centerline (ft.)	700		700	
Parallel Taxiway Centerline (ft.)	400		240	
Edge of Aircraft Parking Apron (ft.)	500		250	
Runway Protection Zones (RPZ)	16	34		
Inner Width (ft.)	500	1,000	500	
Outer Width (ft.)	1,010	1,750	1,000	
Length (ft.)	1,700	2,500	700	
Obstacle Clearance	**16**	**34**	**16R**	**34L**
Approach Slope	34:1	50:1/40:1	34:1	34:1

Taxiway and Taxilane Design Standards

	ADG IV	ADG II	ADG I
Taxiways			
Width (ft.)	75	35	25
Shoulder Width (ft.)	25	10	10
Safety Area Width (ft.)	171	79	49
Object Free Area Width (ft.)	259	131	89
Taxiway Centerline to:			
Parallel Taxiway/Taxilane (ft.)	215	105	69
Fixed or Moveable Object (ft.)	129.5	65.5	44.5
Taxilanes			
Taxilane Centerline to:			
Parallel Taxilane Centerline (ft.)	198	97	64
Fixed or Moveable Object (ft.)	112.5	57.5	39.5
Taxilane Object Free Area (ft.)	225	115	79

* Airport Layout Plan reserves the potential for a 10,000 foot long runway.
Source: FAA Airport Design Software Version 4.2D

- Construct parallel Runway 16R-34L and an associated parallel taxiway to 4,700 feet long and B-II design standards. This will provide additional airfield capacity to meet the long range needs of the airport.

- Install PAPI on Runways 16R-34L and REILs on 16, 16R, and 34L. Precision approach path indicators provide visual descent guidance to pilots, while runway end identifier lights provide visual identification to pilots of the runway end.

LANDSIDE RECOMMENDATIONS

Landside recommendations include passenger terminal area facilities, general aviation terminal facilities, and access roads.

- Complete the transition of the general aviation facilities to the east side. This will include additional aircraft parking apron, a general aviation terminal and auto parking, hangar sites, and an access road.

- Construct an new consolidated fuel farm on the east side of the airfield, immediately north of the general aviation ramp. The fuel farm should be planned to ultimately accommodate 140,000 gallons of storage.

- Acquire 32 acres for expansion of general aviation facilities to the south. Acquire an additional 104 acres to reserve the airfield frontage for future aviation terminal facilities.

- Establish T-hangar areas and a location for corporate hangar parcels.

- Construct an remote, enclosed hold room as an interim measure to accommodate increasing passenger traffic.

- Construct a new terminal building on the east side of the existing terminal apron to accommodate long range growth. This terminal should be initially planned to ultimately accommodate 350,000 annual enplanements.

- Establish a new terminal loop road system and parking lot to the west of the terminal. This will also include a new rental car service and storage area.

- Convert the existing terminal building into a cargo building once the new terminal is in place.

- Provide a south access into the airport from the Bullhead Parkway.

- Convert the west side general aviation area into commercial/ industrial uses to provide revenue support for the operation of the airport.

LAND USE COMPATIBILITY

Land use compatibility refers to a pattern of land uses around the airport which will be most compatible with activities on the airport. The two

primary concerns for land use compatibility are maintaining operationally safe and obstruction free approaches, and minimizing impacts due to aircraft noise. Ensuring compatible land use is a condition of the grant assurances when accepting federal Airport Improvement Program grants. The applicable grant assurances are as follows:

- **Compatible Land Use**: *It (the airport sponsor) will take appropriate action, including the adoption of zoning laws, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility measures upon which federal funds have been expended.*

- **Hazard Removal and Mitigation**: *It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.*

OPERATIONAL PROTECTION

Development within the operational airspace of aircraft using the airport can have an impact on the safe operation of the airport. Because large areas can be affected by the need to constrain heights of objects, zoning is generally the most reasonable and effective means of protection.

To ensure the safety of aircraft arriving and departing the airport and the ability to establish future approaches to each runway end, the City of Bullhead City has established a height overlay zoning district based upon Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace, for Laughlin/Bullhead International Airport. The Part 77 Airspace Drawing prepared for this master plan is a graphic depiction of the Part 77 regulatory criterion applicable to the recommendations of this master plan. The City should consider updating its overlay district to coincide with the updated master plan, once the master plan is approved.

NOISE COMPATIBILITY

Aircraft noise emissions are often the most noticeable environmental effect an airport will produce on the surrounding area. If the sound is sufficiently loud or frequent in occurrence, it may interfere with various activities or otherwise be considered objectionable. To assist planners in ensuring that land uses near the airport are compatible with aircraft operations, federal land use guidelines have been included in this

report and are summarized on **Exhibit 5A**. Current DNL noise contours have been depicted on the Land Use/Noise Drawing of the Airport Layout Plan set.

The City of Bullhead has recognized the need for compatibility with the airport both in its both in its Airport Noise and Height Overlay Zoning and in its General Plan. In combination, these land use tools can continue to maintain compatibility in the airport environs by avoiding residential encroachment within the future airport noise contours.

In addition, the State of Arizona regulates the disclosure of aviation activities to prospective buyers of real estate. In 1997, the adopted legislation allowing airport sponsors to identify Airport Influence Areas around public and commercial use airports.

In 1999, Arizona Revised Statute 28-8464 (Public Airport Disclosure) was added. This statute requires the disclosure of public use airports to prospective purchasers of real estate within the airport "vicinity"(vicinity is defined as the area within the 60 DNL contour and/or traffic pattern airspace). Under this law, a map will be made available upon request to prospective buyers showing areas designated to be within the disclosure area. In addition, all developers of subdivisions or undivided lands must provide a map in their public report showing the location of the property and its proximity to area airports. If the property is determined to be within an airport's "vicinity", then this information will be provided to prospective buyers.

AIRPORT LAYOUT PLAN DRAWINGS

The remainder of this chapter provides a brief description of the airport layout plan drawings that will be submitted to the FAA for review and approval. A reduced size set of these drawings are attached as Appendix B. These drawings have been prepared to graphically depict the ultimate airport layout, facility development, safety areas, and imaginary surfaces that extend beyond airport property lines. The set of plans include:

- Airport Layout Plan
- Terminal Area Plan
- Part 77 Airspace Plan
- Approach Profiles and Runway Protection Zones
- Land Use/Noise Plan
- Airport Property Map

The airport layout plan set was prepared on a computer-aided drafting system as part of the previous master plan effort. Interim updates and the recommendations of this Master Plan Update have been included by simply modifying the plan. The set provides detailed information on existing and future facilities. The set will be submitted to the FAA for approval and must reflect future development under consideration by the FAA for potential funding. Therefore, the drawings should be continually updated as new facilities are constructed (or considered). The plan can be used as base information for design, and can continue to be updated in the future to reflect new development. The plan set is also being provided in 24-inch x 36-inch reproducible hard copy.

98MP18-5A-5/1/00

LAND USE	Yearly Day-Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
RESIDENTIAL						
Residential, other than mobile homes and transient lodgings	Y	N[1]	N[1]	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N[1]	N[1]	N[1]	N	N
PUBLIC USE						
Schools	Y	N[1]	N[1]	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Government services	Y	Y	25	30	N	N
Transportation	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
Parking	Y	Y	Y[2]	Y[3]	Y[4]	N
COMMERCIAL USE						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail-building materials, hardware and farm equipment	Y	Y	Y[2]	Y[3]	Y[4]	N
Retail trade-general	Y	Y	25	30	N	N
Utilities	Y	Y	Y[2]	Y[3]	Y[4]	N
Communication	Y	Y	25	30	N	N
MANUFACTURING AND PRODUCTION						
Manufacturing, general	Y	Y	Y[2]	Y[3]	Y[4]	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y[6]	Y[7]	Y[8]	Y[8]	Y[8]
Livestock farming and breeding	Y	Y[6]	Y[7]	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
RECREATIONAL						
Outdoor sports arenas and spectator sports	Y	Y[5]	Y[5]	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

See other side for notes and key to table.

LAUGHLIN BULLHEAD INTERNATIONAL Airport

Exhibit 5A
LAND USE COMPATIBILITY GUIDELINES

KEY

Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
NLR	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
25, 30, 35	Land Use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

NOTES

1 Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR)of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.

2 Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

3 Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

4 Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

5 Land use compatible provided special sound reinforcement systems are installed.

6 Residential buildings require a NLR of 25.

7 Residential buildings require a NLR of 30.

8 Residential buildings not permitted.

Source: ***F.A.R. Part 150,*** *Appendix A, Table 1.*

LAUGHLIN BULLHEAD INTERNATIONAL Airport

Exhibit 5A (Continued)
LAND USE COMPATIBILITY GUIDELINES

AIRPORT LAYOUT PLAN

The Airport Layout Plan drawing (ALP) graphically presents the existing and ultimate airport layout. It depicts the recommended improvements which will enable the airport to meet forecast aviation demand. The ALP also shows areas of land acquisition to meet development standards and other requirements. The detailed airport and runway data are provided on a supplemental Data Sheet of the ALP to facilitate the interpretation of the master planning recommendation. The Data Sheet also contains wind rose depicting runway wind coverage, vicinity map, and a location map.

TERMINAL AREA PLAN

This drawing provides greater detail of the terminal, air cargo, and general aviation facilities that are located east of Runway 16-34. The Terminal Area Plan represents the selected development configuration. The development of a new airline passenger terminal facility is proposed on the east side of the existing apron. The expanded terminal facility is primarily designed to provide a larger facility more capable of providing for passenger circulation, passenger departure lounges, and efficient security checkpoints. New and larger public and rental car parking lots depicted in the plan are designed to accommodate the long range passenger demand levels. The general aviation facilities are planned to accommodate the transfer of all general aviation activities to the east side of the airport. It also provides for the long range growth in hangars and apron facilities.

F.A.R. PART 77 AIRSPACE DRAWING

To protect the airspace around the airport and approaches to each runway end from hazards that could affect the safe and efficient operation of aircraft arriving and departing the airport, standards contained in F.A.R. Part 77, **Objects Affecting Navigable Airspace**, have been established for use by local authorities to control the height of objects near the airport. The Part 77 Airspace Drawing included in this master plan is a graphical depiction of this regulatory criterion. The Part 77 Airspace Drawing is a tool to aid local authorities in determining if proposed development could present a hazard to the airport and obstruct the approach path to a runway end.

F.A.R. Part 77 Imaginary Surfaces

The Part 77 Airspace Drawing assigns three-dimensional imaginary surfaces to each runway. These imaginary surfaces emanate from the runway centerline and are dimensioned according to visibility minimums associated with each runway approach and aircraft approach speeds. The Part 77 imaginary surfaces include the primary surface, approach surface, transitional surface, horizontal surface, and conical surface. Part 77 imaginary surfaces are described in the following paragraphs and illustrated in **Exhibit 5B**.

Primary Surface

The primary surface is an imaginary surface longitudinally centered on the runway. The primary surface extends 200 feet beyond each runway end. The elevation of any point on the primary surface is the same as the elevation along the nearest associated point on the runway centerline. Under Part 77 regulations, the ultimate primary surface for Runway 16-34 will be 1,000 feet wide, while the primary surface for Runway 16R-34L will be 500 feet wide.

- APPROACH SURFACE

An approach surface is also established for each runway. The approach surface begins at the same width as the primary surface and extends upward and outward from the primary surface end and is centered along an extended runway centerline. The approach surface for Runway 34 extends 50,000 feet from the primary surface at an upward slope of 50:1 for 10,000 feet and 40:1 for the remaining 40,000 feet. The approach surfaces for Runways 16, 16R, and 34L extend 10,000 feet from the primary surface at an upward slope of 34:1.

- TRANSITIONAL SURFACE

Each runway has a transitional surface that begins at the outside edge of the primary surface at the same elevation as the runway. The transitional surface also connects with the approach surfaces of each runway. The surface rises at a slope of 7:1 up to a height which is 150 feet above the highest runway elevation. At that point, the controlling surface is the horizontal surface.

- HORIZONTAL SURFACE

The horizontal surface is established at 150 feet above the highest elevation of the runway surface. Having no slope, the horizontal surface connects the transitional and approach surfaces to the conical surface at a distance of 10,000 feet from the primary surfaces of each runway.

- CONICAL SURFACE

The conical surface begins at the outer edge of the horizontal surface, then continues for an additional 4,000 feet horizontally at a slope of 20:1. Therefore, at 4,000 feet from the horizontal surface, the elevation of the conical surface is 350 feet above the highest airport elevation.

APPROACH PROFILES AND RUNWAY PROTECTION ZONES

The Approach Profiles provide a profile representation of the approach surfaces off each end of the runway. The plan depicts the physical features in the vicinity of each runway's extended centerline, including significant topographic changes, roadways, levees, and railroads. The dimensions and angles of the approach surfaces are also a function of the runway category and instrumentation.

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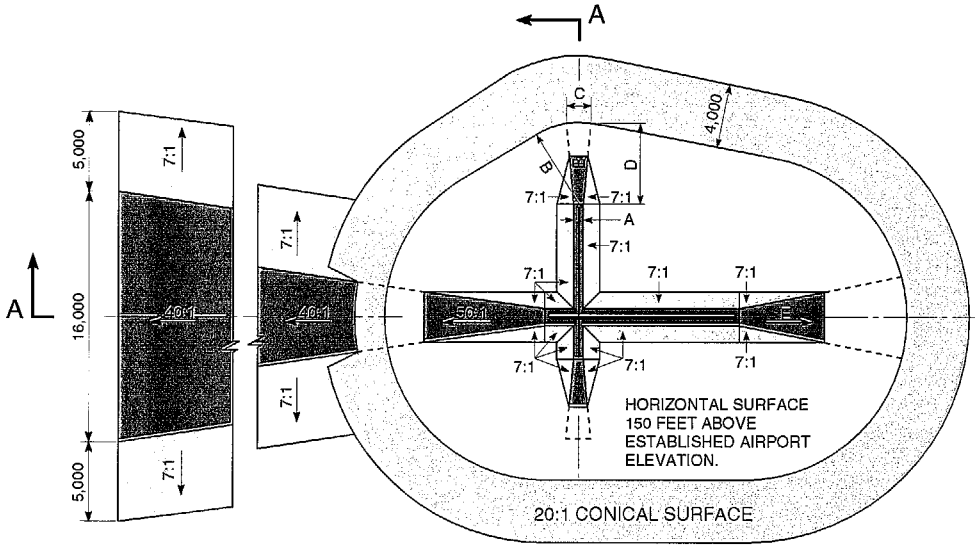
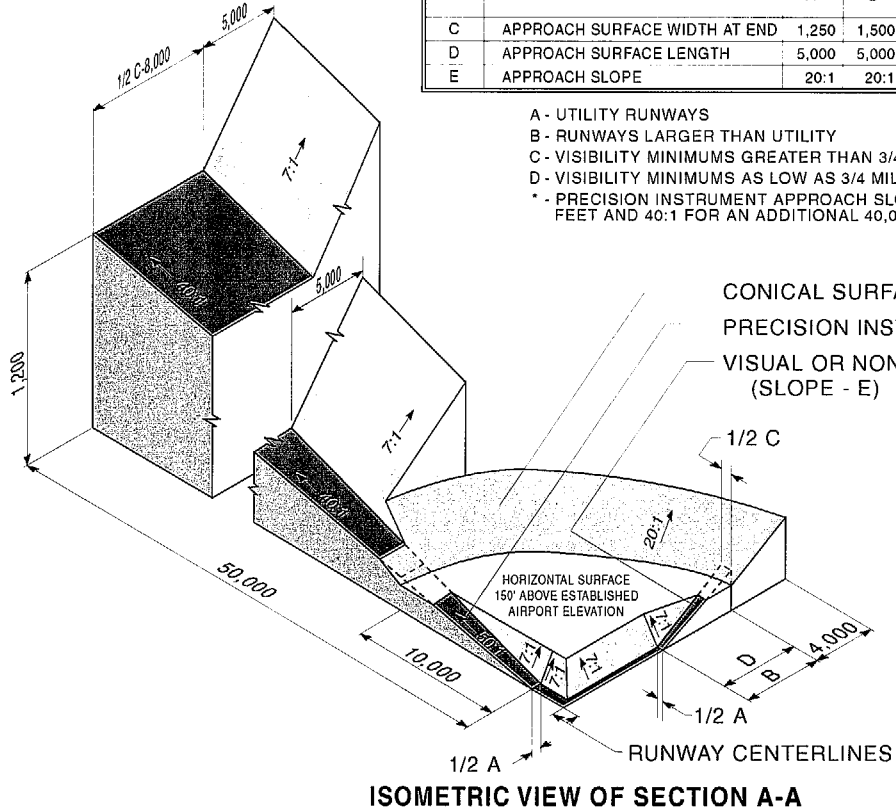


DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B		
					C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B		
					C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A - UTILITY RUNWAYS
B - RUNWAYS LARGER THAN UTILITY
C - VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D - VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* - PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

SOURCE: 14 CFR Part 77, Section 77.25, Civil Airport Imaginary Surfaces.

LAUGHLIN BULLHEAD INTERNATIONAL Airport

Exhibit 5B
EXAMPLE OF F.A.R. PART 77 CRITERIA

Also included is a scaled drawing of the runway protection zone, obstacle free zone, obstacle free area, and safety area for each runway end. The drawing provides plan and profile views of the runway ends which can assist airport staff, engineers, or consultants with identification of existing obstructions or potential obstructions within these areas.

AIRPORT LAND USE DRAWING

The objective of the Airport Land Use Drawing is to coordinate uses of the airport property in a manner compatible with the functional design of the airport facility. Airport land use planning is important for the orderly development and efficient use of available space. There are two primary considerations for airport land use planning: first, to secure those areas essential to the safe and efficient operation of the airport; and second, to determine compatible land uses for the balance of the property which would be most advantageous to the airport. DNL noise contours for the forecast 2020 condition have been depicted on the drawing. The plan depicts the ultimate land use development on the airport.

PROPERTY MAP

The Property Map provides information on the acquisition and identification of all land tracts comprising Laughlin/ Bullhead International Airport. It denotes the recording information for all tracts of property. The airports parcels are all owned by Mohave County and are under long term lease to the Mohave County Airport Authority.

SUMMARY

The airport layout drawings are designed to assist the Mohave County Airport Authority in decision-making relative to future development. The plan considers anticipated development needs based upon forecasts developed for a 20-year planning period. Flexibility will be essential in future development as activity may not occur exactly as forecast.

The Part 77 Airspace Drawings should be used by local officials as a tool to ensure land use compatibility and restrict the heights of future structures or antennae which could pose a hazard to air navigation. It should be noted that the Part 77 drawing has changed since the last master plan was undertaken for the airport. Therefore, the Airport Authority will need to coordinate the new airspace drawing with the City of Bullhead City. The drawings provide the Airport Authority with overall direction for development, ensuring long term airport viability and services for the Laughlin/Bullhead region.

AIRPORT MASTER PLAN

LAUGHLIN BULLHEAD INTERNATIONAL Airport

BULLHEAD CITY, ARIZONA

AIRPORT LAYOUT PLAN SET

INDEX OF DRAWINGS

PREPARED FOR
MOHAVE COUNTY AIRPORT AUTHORITY

Coffman Associates
Airport Consultants

AIRPORT DATA

LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT (IFP)			
CITY: BULLHEAD CITY		COUNTY: MOHAVE, ARIZONA	
RANGE: R21W / T20N, R21W / T21N		OWNER: MOHAVE COUNTY	
		EXISTING	ULTIMATE
NATIONAL PLAN of INTEGRATED AIRPORT SYSTEMS (NPIAS) SERVICE LEVEL		PRIMARY	PRIMARY
DESIGN AIRCRAFT		B-737-300	B-757/G-IV
AIRPORT REFERENCE CODE (ARC): RUNWAY CATEGORY/DESIGN GROUP		C-III	D-IV, B-II
AIRPORT ELEVATION (ABOVE MEAN SEA LEVEL)		694.9'	704.0'
MEAN MAXIMUM TEMPERATURE OF HOTTEST MONTH		108.2° F(July)	SAME
AIRPORT REFERENCE POINT	Latitude	35°09'26.58" N	35°09'24.99" N
(ARP) COORDINATES (NAD 83)	Longitude	114°33'34.34" W	114°33'16.68" W
AIRPORT and TERMINAL NAVIGATIONAL AIDS		ROTATING BEACON VOR/DME GPS ATCT -- --	ROTATING BEACON SAME GPS -- AWOS-3 ATCT

RUNWAY END COORDINATES (NAD 83)

		EXISTING	ULTIMATE
RUNWAY 16L	Latitude	35°10'03.59" N	SAME
	Longitude	114°33'37.14" W	SAME
RUNWAY 34R	Latitude	35°08'49.59" N	35°09'29.37" N
	Longitude	114°33'30.84" W	114°32'31.21" W
RUNWAY 16R	Latitude	--	35°09'19.95" N
	Longitude	--	114°33'27.31" W
RUNWAY 34L	Latitude	--	35°09'22.46" N
	Longitude	--	114°32'30.80" W

DEVIATIONS FROM FAA AIRPORT DESIGN STANDARDS

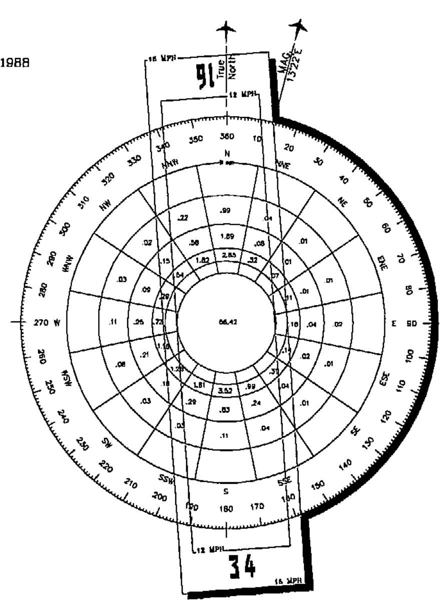
DEVIATION DESCRIPTION	EFFECTED DESIGN STANDARD	STANDARD	EXISTING	PROPOSED DISPOSITION
NONE	-	-	-	-

ALL WEATHER WIND COVERAGE

RUNWAYS	10.5 KNOTS (12 M.P.H.)	13 KNOTS (15 M.P.H.)
Runway 16-34	96.4%	98.9%

SOURCE:
Airport Layout Plan, dated 01-08-1988
NOAA National Climatic Center
Asheville, N.C.
Laughlin/Bullhead City Airport
Bullhead City, Arizona

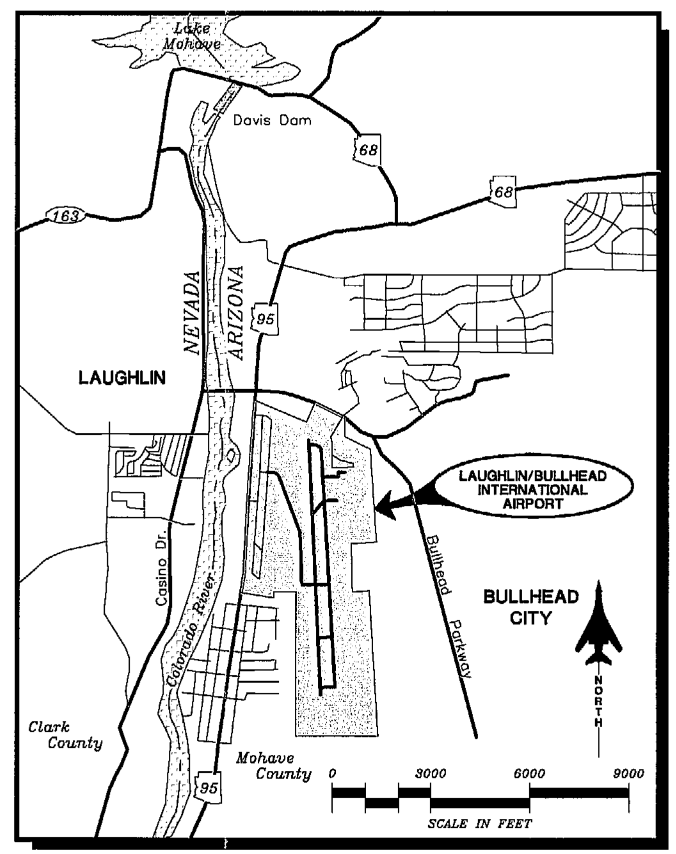
OBSERVATIONS:
1955-1964
Number of Observations Unknown
Most Recent Data Available



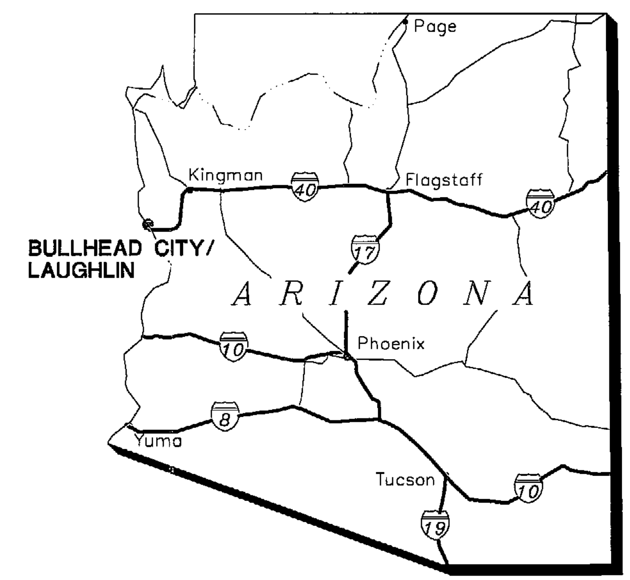
RUNWAY DATA

RUNWAY DATA	RUNWAY 16L-34R		RUNWAY 16R-34L	
	EXISTING	ULTIMATE	EXISTING	ULTIMATE
RUNWAY CATEGORY/AIRCRAFT DESIGN GROUP	C-III	D-IV	--	B-II
RUNWAY AZIMUTH	356.5456°	SAME	--	356.5456°
RUNWAY BEARING	N3°32'44" W	SAME	--	N3°32'44" W
RUNWAY DIMENSIONS	7500' X 150'	9000' x 150'	--	4700' x 75'
MAXIMUM RUNWAY ELEVATION (above MSL)	695'	704'	--	695'
WIND COVERAGE (in %)	SEE ALL WEATHER AND IFR WIND ROSE DATA BELOW LEFT			
APPROACH VISIBILITY MINIMUMS	VISUAL/>3/4 MILE	1 MILE/ 1/2 MILE	--	1 MILE/ 1 MILE
FAR PART 77 CATEGORY	VISUAL/3/4 MILE	NONPRECISION/PRECISION	--	NONPRECISION
RUNWAY INSTRUMENTATION	VISUAL/NONPRECISION	VISUAL/PRECISION	--	NONPRECISION/NONPRECISION
RUNWAY APPROACH SURFACES	20:1/34:1	34:1/50:1	--	34:1/34:1
RUNWAY THRESHOLD DISPLACEMENT	NONE	NONE	--	NONE
RUNWAY STOPWAY	NONE	NONE	--	NONE
RUNWAY SAFETY AREA (RSA)	9500' X 500'	11,000' X 500'	--	5300' X 150'
RSA DISTANCE BEYOND EACH RUNWAY END	1000'	1000'	--	300'
RUNWAY OBJECT FREE AREA (OFA)	9500' X 800'	11,000' X 800'	--	5300' X 500'
RUNWAY OBSTACLE FREE ZONE (OFZ)	7900' X 400'	9400' X 400'	--	5100' X 400'
RUNWAY PAVEMENT MATERIAL	ASPHALT	ASPHALT	--	ASPHALT
PAVEMENT SURFACE TREATMENT	NONE	NONE	--	NONE
PAVEMENT STRENGTH (in thousand lbs.) [1]	200(D)	200(D)	--	30(S)
RUNWAY EFFECTIVE GRADIENT (in %)	0.93	0.94	--	1.06
RUNWAY LIGHTING	MIRL	HIRL	--	MIRL
RUNWAY MARKING	NONPRECISION	NONPRECISION/PRECISION	--	NONPRECISION/NONPRECISION
RUNWAY APPROACH LIGHTING	NONE	MALSR(34R)	--	NONE
TAXIWAY PAVEMENT MATERIAL	ASPHALT	ASPHALT	--	ASPHALT
TAXIWAY LIGHTING	MITL	MITL	--	MITL
TAXIWAY MARKING	CENTERLINE/EDGE	CENTERLINE/EDGE	--	CENTERLINE
NAVIGATIONAL AIDS	GPS(34) VOR/DME(34) -- --	GPS CAT I GPS (34R) -- --	-- -- -- --	GPS -- -- --
VISUAL AIDS	PAPI-4/PAPI-4 REIL/REIL -- --	PAPI-4/PAPI-4 REIL/REIL MALSR(34R) --	-- -- -- --	PAPI/PAPI REIL/REIL -- --

[1] Pavement strengths are expressed in Single(S) and Dual(D) wheel loading capacities.



VICINITY MAP



LOCATION MAP

No.	REVISIONS	DATE	BY	APP'D.
⚠	UPDATED AIRPORT MASTER PLAN	4/30/00	MJR	SGB
⚠	ADDED INTERIM WEST APRON	6/2/93	JMH	DT
⚠	ADDED PARALLEL TAXIWAY	9-15-88	JMH	DT

"THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS."

LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

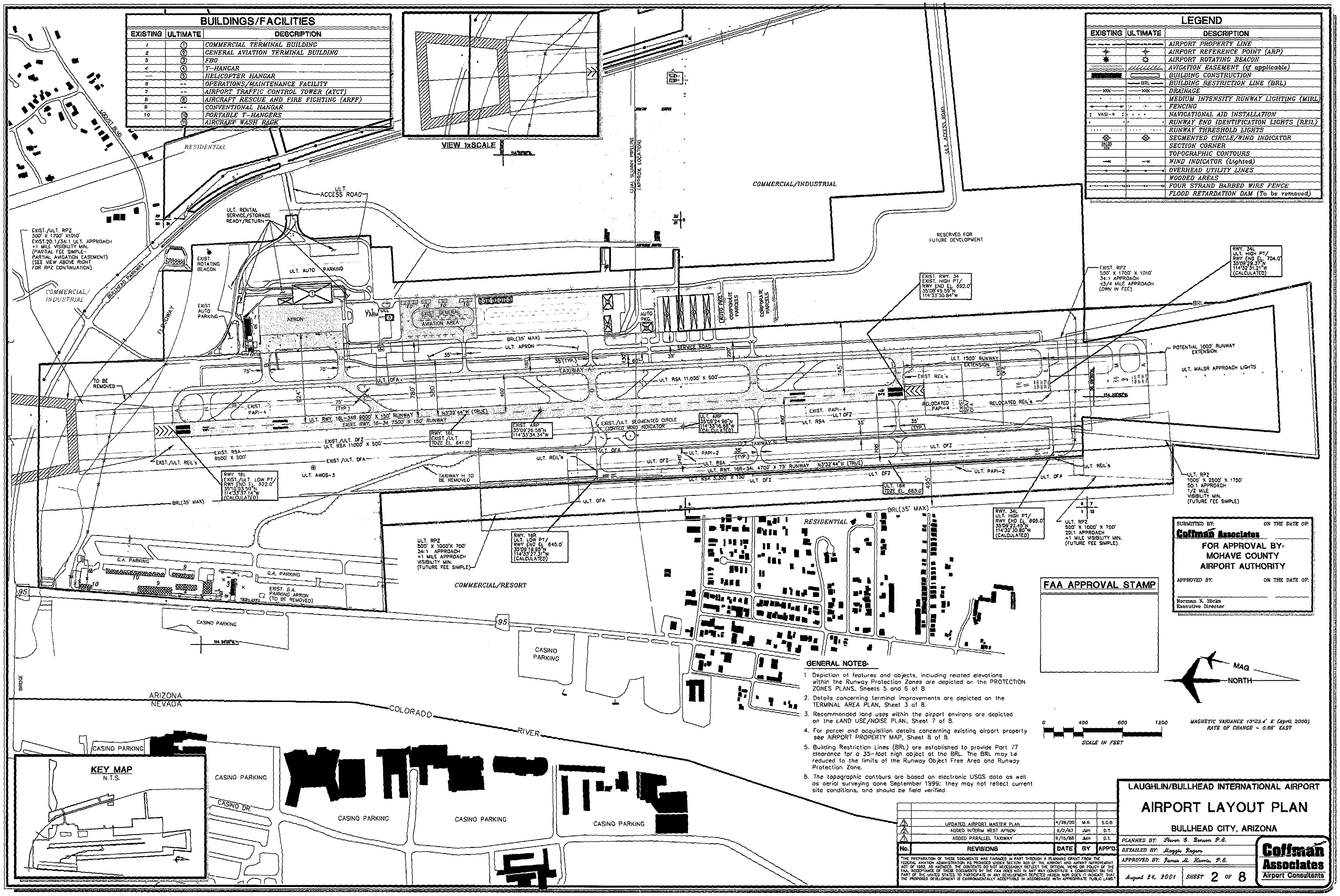
AIRPORT DATA SHEET

BULLHEAD CITY, ARIZONA

PLANNED BY: Steven G. Benson P.E.
DETAILED BY: Maggie Rogers
APPROVED BY: James M. Harris, P.E.

November 28, 2000 SHEET 1 OF 8

Coffman Associates Airport Consultants



BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION
1	①	COMMERCIAL TERMINAL BUILDING
2	②	GENERAL AVIATION TERMINAL BUILDING
3	③	FBO
4	④	T-HANGAR
--	⑤	HELICOPTER HANGAR
6	--	OPERATIONS/MAINTENANCE FACILITY
7	--	AIRPORT TRAFFIC CONTROL TOWER (ATCT)
8	⑧	AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF)
9	--	CONVENTIONAL HANGAR
10	⑩	PORTABLE T-HANGERS
	⑪	AIRCRAFT WASH RACK

LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		AVIGATION EASEMENT (if applicable)
		BUILDING CONSTRUCTION
	BRL	BUILDING RESTRICTION LINE (BRL)
xxx	xxx	DRAINAGE
		MEDIUM INTENSITY RUNWAY LIGHTING (MIRL)
		FENCING
VASI-4		NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
		SEGMENTED CIRCLE/WIND INDICATOR
34|35 3|2		SECTION CORNER
		TOPOGRAPHIC CONTOURS
		WIND INDICATOR (Lighted)
		OVERHEAD UTILITY LINES
		WOODED AREAS
		FOUR STRAND BARBED WIRE FENCE
		FLOOD RETARDATION DAM (To be removed)

SUBMITTED BY: Coffman Associates ON THE DATE OF:

FOR APPROVAL BY: MOHAVE COUNTY AIRPORT AUTHORITY

APPROVED BY: ON THE DATE OF:

Norman K. Hicks
Executive Director

FAA APPROVAL STAMP

GENERAL NOTES:

1. Depiction of features and objects, including related elevations within the Runway Protection Zones are depicted on the PROTECTION ZONES PLANS, Sheets 5 and 6 of 8.
2. Details concerning terminal improvements are depicted on the TERMINAL AREA PLAN, Sheet 3 of 8.
3. Recommended land uses within the airport environs are depicted on the LAND USE/NOISE PLAN, Sheet 7 of 8.
4. For parcel and acquisition details concerning existing airport property see AIRPORT PROPERTY MAP, Sheet 8 of 8.
5. Building Restriction Lines (BRL) are established to provide Part 77 clearance for a 35-foot high object at the BRL. The BRL may be reduced to the limits of the Runway Object Free Area and Runway Protection Zone.
6. The topographic contours are based on electronic USGS data as well as aerial surveying done September 1999; they may not reflect current site conditions, and should be field verified.

No.	REVISIONS	DATE	BY	APP'D.
3	UPDATED AIRPORT MASTER PLAN	4/28/00	M.R.	S.G.B.
2	ADDED INTERIM WEST APRON	5/2/93	JMH	D.T.
1	ADDED PARALLEL TAXIWAY	9/15/88	JMH	D.T.

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LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

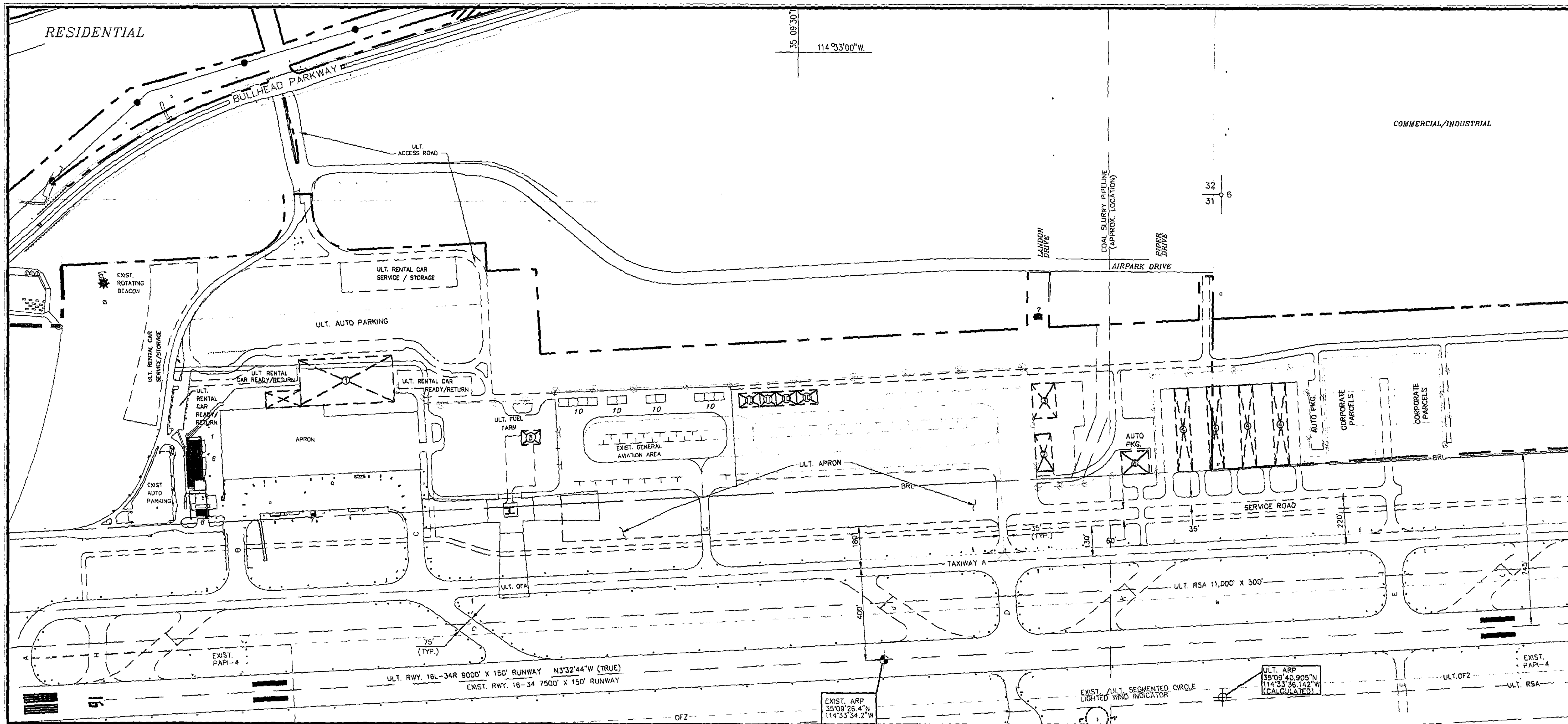
AIRPORT LAYOUT PLAN

BULLHEAD CITY, ARIZONA

PLANNED BY: Steven G. Benson P.E.
DETAILED BY: Maggie Rogers
APPROVED BY: James M. Harris, P.E.

August 24, 2001 SHEET 2 OF 8

Coffman Associates Airport Consultants



LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		AVIGATION EASEMENT (if applicable)
		BUILDING CONSTRUCTION
	BRL	BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		MEDIUM INTENSITY RUNWAY LIGHTING (MIRL)
		FENCING
VASI-4		NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
		SEGMENTED CIRCLE/WIND INDICATOR
34|35 3|2		SECTION CORNER
		TOPOGRAPHIC CONTOURS
		WIND INDICATOR (Lighted)
		OVERHEAD UTILITY LINES
		WOODED AREAS
		FOUR STRAND BARBED WIRE FENCE
		FLOOD RETARDATION DAM (To be removed)

BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION
1	①	COMMERCIAL TERMINAL BUILDING
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4	④	T-HANGAR
--	⑤	HELICOPTER HANGAR
6	--	OPERATIONS/MAINTENANCE FACILITY
7	--	AIRPORT TRAFFIC CONTROL TOWER (ATCT)
8	⑧	AIRCRAFT RESCUE AND FIREFIGHTING (ARFF)
9	--	CONVENTIONAL HANGAR
10	⑩	PORTABLE T-HANGERS
--	⑪	AIRCRAFT WASH RACK

0 200 400 600
SCALE IN FEET

NORTH

No.	REVISIONS	DATE	BY	APP'D.
3	UPDATED AIRPORT MASTER PLAN	4/28/00	MJR	SGB
2	ADDED INTERIM WEST APRON	6/2/93	JMH	DT
1	ADDED PARALLEL TAXIWAY	9/15/88	JMH	DT

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LAUGHLIN/BULLHEAD INTERNATIONAL AIRPOET

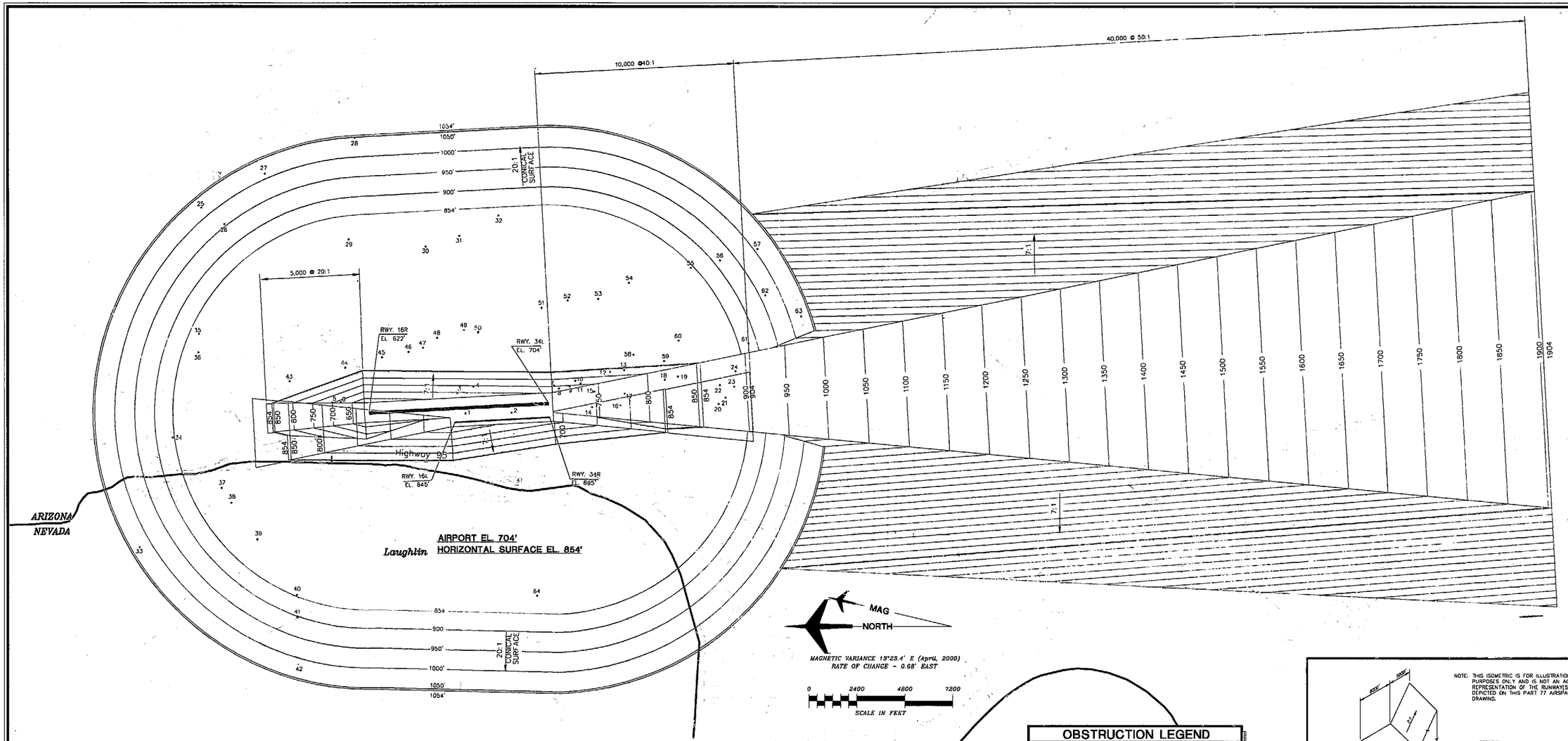
TERMINAL AREA PLAN

BULLHEAD CITY, ARIZONA

PLANNED BY: Steven G. Benson P.E.
DETAILED BY: Maggie Rogers
APPROVED BY: James M. Harris, P.E.
August 27, 2001 SHEET 3 OF 8

Coffman Associates Airport Consultants

Coffman Associates lbhtap.DWG 08/27/2001



OBSTRUCTION TABLE

Object Description	Object Elevation	Obstructed Part 77 Surface	Surface Elevation	Object Penetration	Proposed Object Disposition
1. OL on lighted windsock	875'	Primary	666'	+9'	To remain lighted
2. Ground	891'	Primary	587'	+4'	See Note [1] below
3. Fence	889'	Primary	573'	+16'	To be removed
4. Ground	744'	Transitional	718'	+26'	See Note [1] below
5. Pole	707'	Transitional	702'	+5'	See Note [1] below
6. Ltng. Rod on OL Pole	685'	Transitional	682'	+3'	To remain lighted
7. Bush	758'	Transitional	750'	+9'	
8. Bush	733'	Transitional	728'	+5'	
9. Ground	745'	Transitional	741'	+4'	
10. Ground	786'	Transitional	775'	+9'	
11. Bush	790'	Transitional	754'	+38'	
12. Bush	855'	Transitional	824'	+31'	
13. Bush	889'	Transitional	831'	+58'	
14. Bush	765'	Approach	749'	+16'	
15. Bush	791'	Approach	752'	+39'	
16. Bush	782'	Approach	777'	+5'	
17. Bush	799'	Approach	782'	+17'	
18. Ground	869'	Approach	823'	+46'	
19. Bush	882'	Approach	837'	+45'	See Note [1] below
20. Bush	921'	Approach	876'	+45'	
21. Ground	947'	Approach	884'	+63'	
22. Bush	961'	Approach	879'	+82'	
23. Ground	959'	Approach	893'	+66'	
24. Bush	982'	Approach	895'	+87'	
25. Transmission tower	1273'	Conical	1014'	+259	
26. Building	1154'	Conical	945'	+209'	
27. Antenna	1289'	Conical	1004'	+285'	
28. Vent on Building	1354'	Conical	1044'	+310'	
29. Bush	1158'	Horizontal	850'	+308'	
30. Ground	1136'	Horizontal	850'	+286'	
31. Bush	1175'	Horizontal	850'	325'	
32. Bush	1158'	Horizontal	850'	+308'	

[1] Request FAA Aeronautical Study.

OBSTRUCTION TABLE

Object Description	Object Elevation	Obstructed Part 77 Surface	Surface Elevation	Object Penetration	Proposed Object Disposition
33. Ground	1038'	Conical	1017'	+21'	
34. Transmission tower	887'	Horizontal	850'	+37'	
35. Transmission tower	953'	Horizontal	850'	+103'	
36. Transmission tower	883'	Horizontal	850'	+33'	
37. Transmission tower	853'	Horizontal	850'	+3'	
38. Transmission tower	855'	Horizontal	850'	+5'	
39. Transmission tower	925'	Horizontal	850'	+75'	
40. Transmission tower	908'	Horizontal	850'	+58'	
41. Transmission tower	907'	Horizontal	850'	+57'	
42. Transmission tower	1025'	Horizontal	850'	+175'	
43. Transmission tower	867'	Horizontal	850'	+17'	
44. Transmission tower	865'	Horizontal	850'	+15'	
45. Transmission tower	876'	Horizontal	850'	+26'	
46. Ltng. Rod on OL Pole	882'	Horizontal	850'	+32'	To remain lighted
47. Ltng. Rod on OL Pole	895'	Horizontal	850'	+45'	To remain lighted
48. Transmission tower	908'	Horizontal	850'	+58'	See Note [1] below
49. Transmission tower	940'	Horizontal	850'	+90'	See Note [1] below
50. Ltng. Rod on OL Pole	944'	Horizontal	850'	+94'	To remain lighted
51. Transmission tower	1060'	Horizontal	850'	+210'	
52. Transmission tower	1085'	Horizontal	850'	235'	
53. Pole	1129'	Horizontal	850'	+279'	
54. Transmission tower	1066'	Horizontal	850'	+216'	
55. Transmission tower	1199'	Conical	855'	+344'	
56. Transmission tower	1243'	Conical	923'	+320'	
57. Transmission tower	1267'	Conical	1016'	+251'	
58. Bush	903'	Horizontal	850'	+53'	
59. Bush	932'	Horizontal	850'	+82'	
60. Bush	988'	Horizontal	850'	138'	
61. Bush	1027'	Conical	890'	+137'	
62. Sign	1107'	Conical	973'	+134'	
63. Ground	1081'	Conical	1039'	+42'	
64. Ltng. Rod on OL Stack	1219'	Horizontal	850'	+369'	To remain lighted

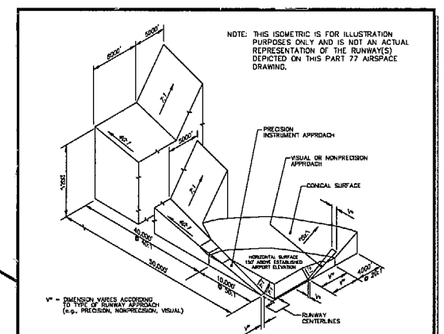
OBSTRUCTION LEGEND

[1] OBSTRUCTION

GROUP or MULTIPLE OBSTRUCTIONS

GENERAL NOTES:

1. Obstructions, clearances, and locations are calculated from ultimate runway end elevations and ultimate approach surfaces, unless otherwise noted.
2. Depiction of features and objects within the outer and inner portion of the approach surfaces, is illustrated on the APPROACH ZONES PROFILES & RUNWAY PROTECTION ZONE PROFILES sheet 4 & 5 of these plans.
3. Additional obstruction data is illustrated on National Ocean Survey document OC 6967, AIRPORT OBSTRUCTION CHART.
4. Existing and future height and hazard ordinances are to be amended and/or referenced upon approval of updated PART 77 AIRSPACE PLAN.



ISOMETRIC VIEW OF SECTION THRU CENTERLINE OF RUNWAYS

N.T.S.

No.	REVISIONS	DATE	BY	APP'D.
3	UPDATED AIRPORT MASTER PLAN	4/28/00	M.R.	S.C.B.
2	ADDED INTERIM WEST APRON	6/2/93	JMH	D.T.
1	ADDED PARALLEL TAXIWAY	9/15/88	JMH	D.T.

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LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

PART 77 AIRSPACE PLAN

BULLHEAD CITY, ARIZONA

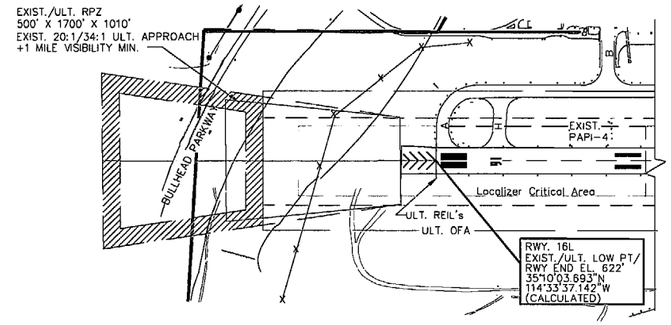
PLANNED BY: Klaus Benson P.E.

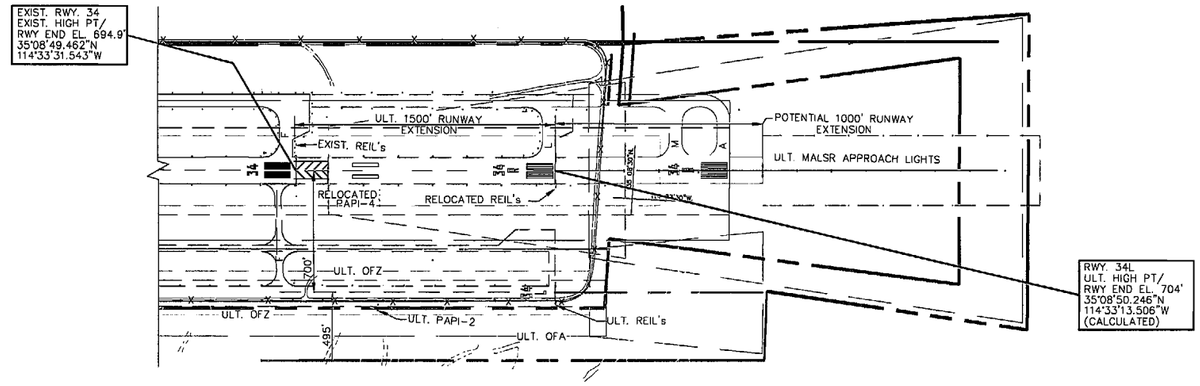
DETAILED BY: Maggie Rogers

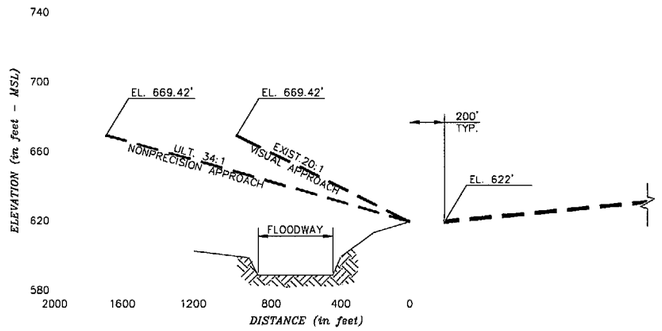
APPROVED BY: James M. Harris, P.E.

November 28, 2000 | SHEET 4 OF 8

Coffman Associates
Airport Consultants

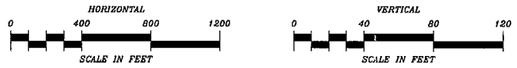


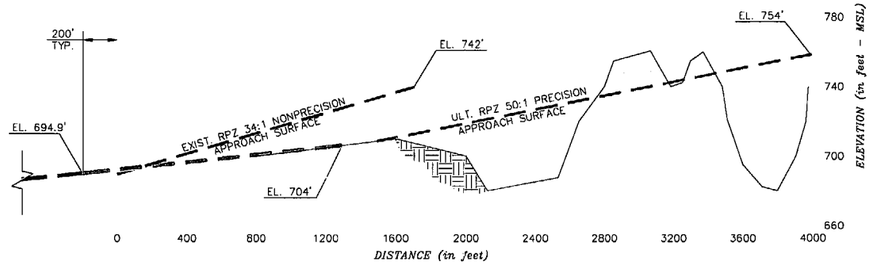




NORTH

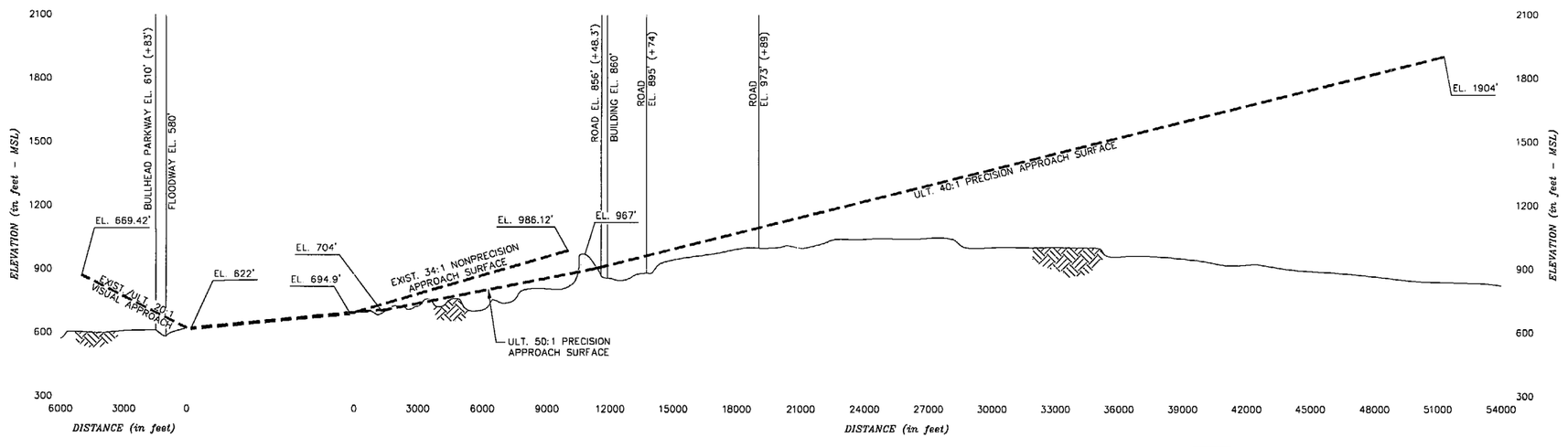
RUNWAY 16L-34R
PROTECTION ZONES PLANS AND PROFILES



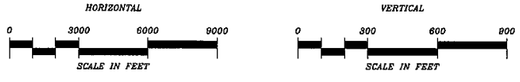


RUNWAY 16L

RUNWAY 34R



RUNWAY 16L-34R
APPROACH ZONES PROFILES



– GROUP OR MULTIPLE OBSTRUCTIONS (TERRAIN)

No.	REVISIONS	DATE	BY	APP'D.
3	UPDATED AIRPORT MASTER PLAN	4/28/00	M.R.	S.G.B.
2	ADDED INTERIM WEST APRON	8/2/93	JMH	D.T.
1	ADDED PARALLEL TAXIWAY	9/15/88	JMH	D.T.

LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

APPROACH PROFILES AND RUNWAY PROTECTION ZONES RUNWAY 16L-34R

BULLHEAD CITY, ARIZONA

PLANNED BY: Steven G. Benson P.E.
DETAILED BY: Maggie Rogers
APPROVED BY: James M. Harris, P.E.

November 28, 2000 | SHEET 5 OF 8

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Airport Consultants
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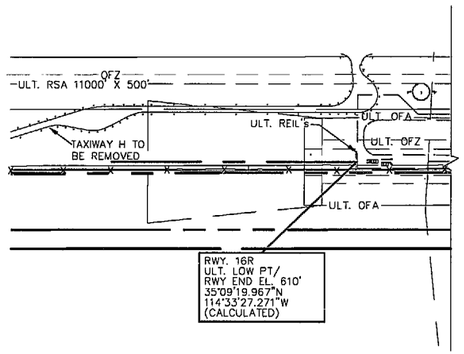
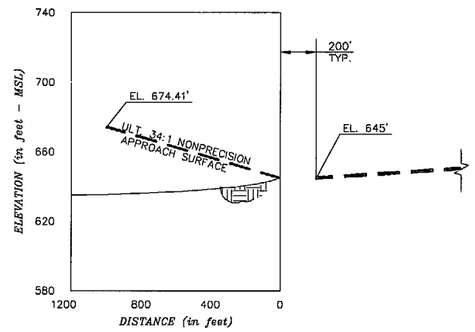
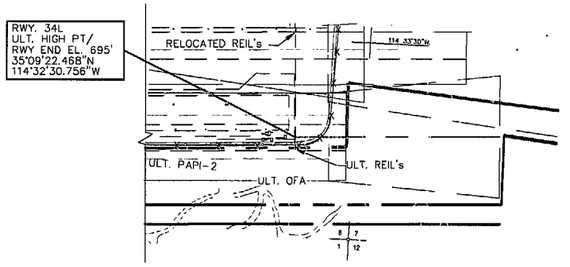
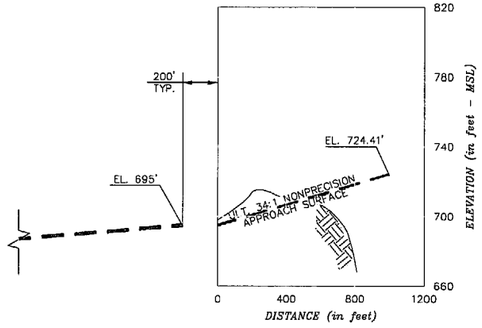
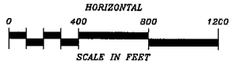


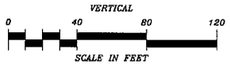






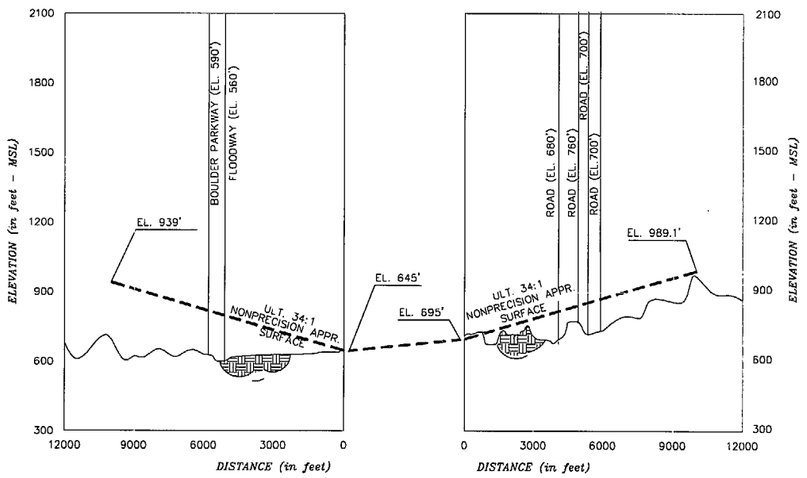
RUNWAY 16R-34L
PROTECTION ZONES PLANS AND PROFILES



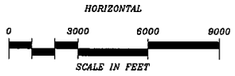


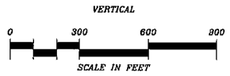
RUNWAY 16R

RUNWAY 34L



RUNWAY 16R-34L
APPROACH ZONES PROFILES





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2	ADDED INTERIM WEST APRON	6/2/93	JMH	D.T.
1	ADDED PARALLEL TAXIWAY	9/15/88	JMH	D.T.

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LAUGLIN/BULLHEAD INTERNATIONAL AIRPORT

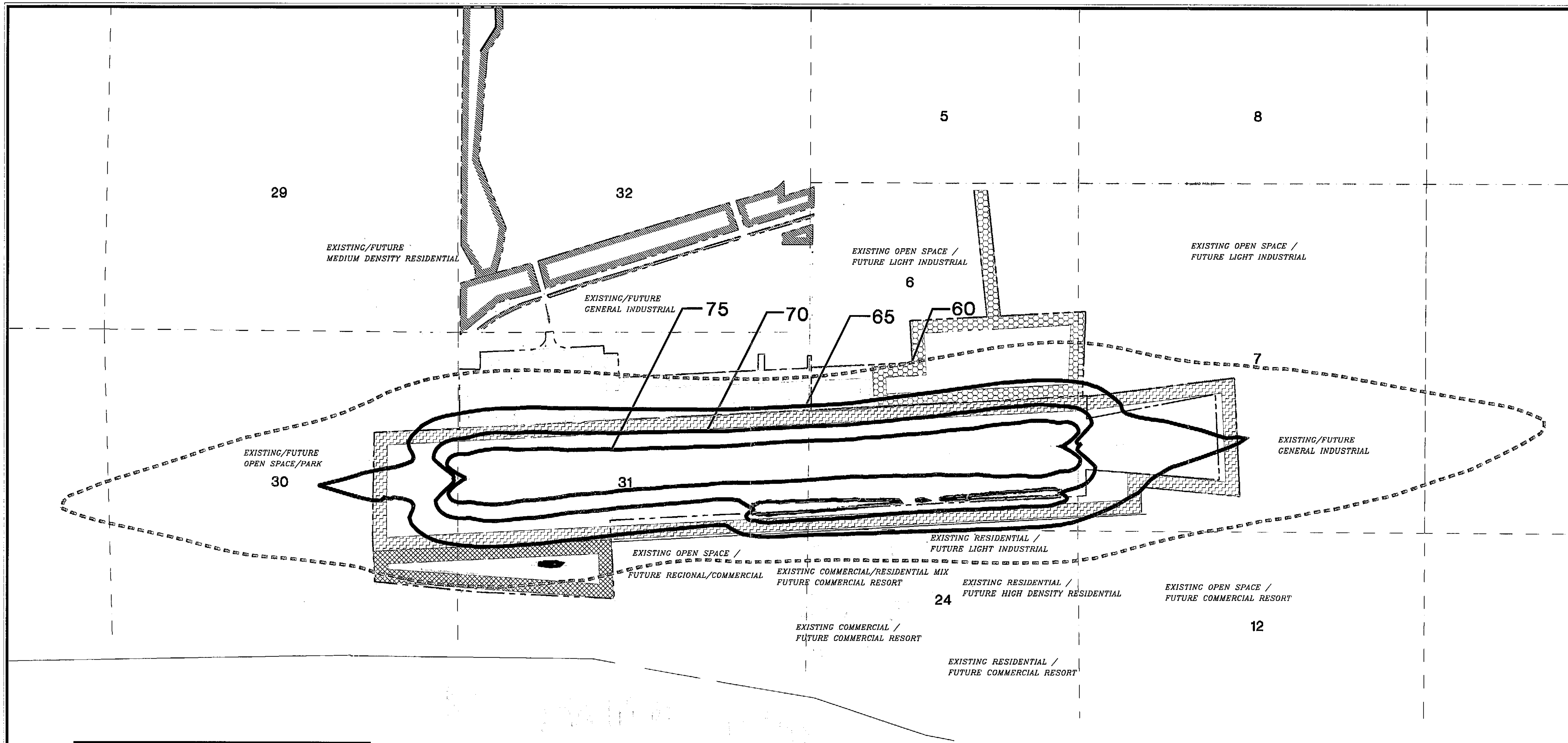
APPROACH PROFILES AND RUNWAY PROTECTION ZONES
RUNWAY 16R-34L

BULLHEAD CITY, ARIZONA

PLANNED BY: Steven G. Benson P.E.
DETAILED BY: Maggie Rogers
APPROVED BY: James M. Harris, P.E.

Coffman Associates
Airport Consultants
www.coffmanassociates.com

November 28, 2000 | SHEET 6 OF 8



LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		AVICATION EASEMENT (if applicable)
		BUILDING CONSTRUCTION
		BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		MEDIUM INTENSITY RUNWAY LIGHTING (MIRL)
		FENCING
		NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
		SEGMENTED CIRCLE/WIND INDICATOR
		SECTION CORNER
		TOPOGRAPHIC CONTOURS
		WIND INDICATOR (Lighted)
		OVERHEAD UTILITY LINES
		WOODED AREAS
		FOUR STRAND BARBED WIRE FENCE
		FLOOD RETARDATION DAM (To be removed)

LAND USE LEGEND

AIRPORT OPERATIONS AREA

COMMERCIAL SERVICE

GENERAL AVIATION

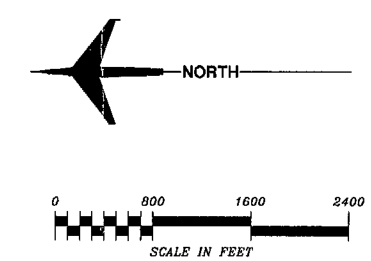
FUTURE AVIATION DEVELOPEMENT

OPEN SPACE

65 — DNL CONTOUR - 2015

SECTION LINE

30 — SECTION NUMBER



NOTES:

OFF AIRPORT LAND USES AS DEFINED IN BULLHEAD CITY GENERAL PLAN UPDATE DECEMBER,1995.

No.	REVISIONS	DATE	BY	APP'D.
3	UPDATED AIRPORT MASTER PLAN	4/30/00	MJR	SGB
2	ADDED INTERIM WEST APRON	6/2/93	JMH	DT
1	ADDED PARALLEL TAXIWAY	9/15/88	JMH	DT

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LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

LAND USE/NOISE PLAN

BULLHEAD CITY, ARIZONA

PLANNED BY: Steve G. Benson P.E.
DETAILED BY: Maggie Rogers
APPROVED BY: James M. Harris, P.E.

August 27, 2001 SHEET 7 OF 8

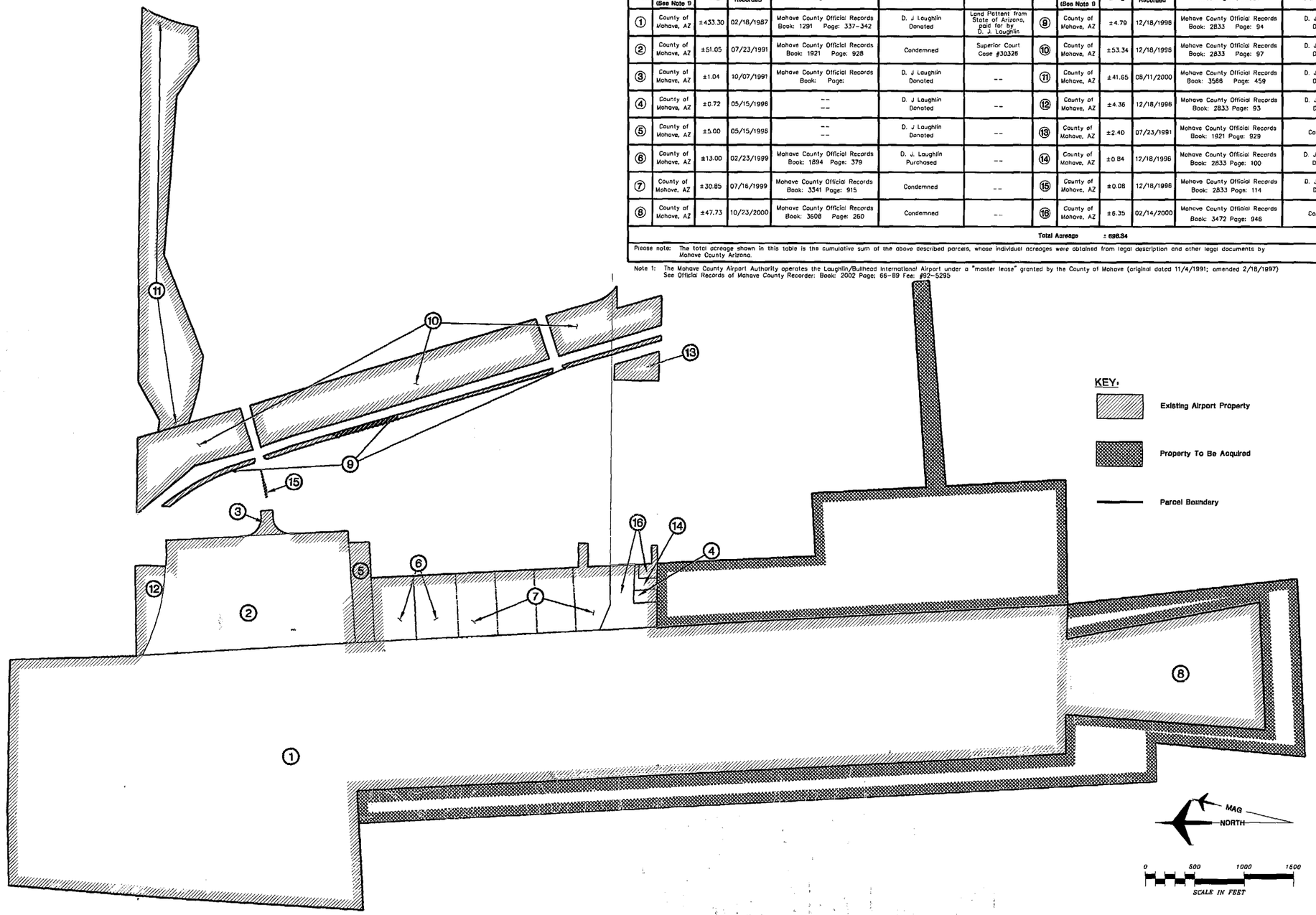
Coffman Associates Airport Consultants

RECORDING INFORMATION (County Assessor - Mohave County, Arizona.)

Parcel	Owner (See Note 1)	Acreage	Date Recorded	Recording Information	Grantor/Method	Notes:	Parcel	Owner (See Note 1)	Acreage	Date Recorded	Recording Information	Grantor/Method	Notes:
①	County of Mohave, AZ	±433.30	02/18/1987	Mohave County Official Records Book: 1291 Page: 337-342	D. J Laughlin Donated	Land Patent from State of Arizona, paid for by D. J. Laughlin	⑨	County of Mohave, AZ	±4.79	12/18/1998	Mohave County Official Records Book: 2833 Page: 94	D. J. Laughlin Donated	N/A
②	County of Mohave, AZ	±51.05	07/23/1991	Mohave County Official Records Book: 1921 Page: 928	Condemned	Superior Court Case #30328	⑩	County of Mohave, AZ	±53.34	12/18/1998	Mohave County Official Records Book: 2833 Page: 97	D. J. Laughlin Donated	N/A
③	County of Mohave, AZ	±1.04	10/07/1991	Mohave County Official Records Book: Page:	D. J Laughlin Donated	--	⑪	County of Mohave, AZ	±41.65	08/11/2000	Mohave County Official Records Book: 3566 Page: 459	D. J. Laughlin Donated	N/A
④	County of Mohave, AZ	±0.72	05/15/1998	-- --	D. J Laughlin Donated	--	⑫	County of Mohave, AZ	±4.36	12/18/1998	Mohave County Official Records Book: 2833 Page: 93	D. J. Laughlin Donated	N/A
⑤	County of Mohave, AZ	±5.00	05/15/1998	-- --	D. J Laughlin Donated	--	⑬	County of Mohave, AZ	±2.40	07/23/1991	Mohave County Official Records Book: 1921 Page: 929	Condemned	--
⑥	County of Mohave, AZ	±13.00	02/23/1999	Mohave County Official Records Book: 1894 Page: 379	D. J. Laughlin Purchased	--	⑭	County of Mohave, AZ	±0.84	12/18/1998	Mohave County Official Records Book: 2833 Page: 100	D. J. Laughlin Donated	--
⑦	County of Mohave, AZ	±30.85	07/16/1999	Mohave County Official Records Book: 3341 Page: 915	Condemned	--	⑮	County of Mohave, AZ	±0.08	12/18/1998	Mohave County Official Records Book: 2833 Page: 114	D. J. Laughlin Donated	--
⑧	County of Mohave, AZ	±47.73	10/23/2000	Mohave County Official Records Book: 3608 Page: 260	Condemned	--	⑯	County of Mohave, AZ	±6.35	02/14/2000	Mohave County Official Records Book: 3472 Page: 946	Condemned	--
								Total Acreage	± 698.34				

Please note: The total acreage shown in this table is the cumulative sum of the above described parcels, whose individual acreages were obtained from legal description and other legal documents by Mohave County Arizona.

Note 1: The Mohave County Airport Authority operates the Laughlin/Bullhead International Airport under a "master lease" granted by the County of Mohave (original dated 11/4/1991; amended 2/18/1997) See Official Records of Mohave County Recorder: Book: 2002 Page: 66-89 Fee: #92-5295



KEY:

- Existing Airport Property
- Property To Be Acquired
- Parcel Boundary

MAG NORTH

0 500 1000 1500

SCALE IN FEET

No.	REVISIONS	DATE	BY	APP'D.
3	UPDATED AIRPORT MASTER PLAN	4/28/00	M.R	S.G.B.
2	ADDED INTERIM WEST APRON	8/2/93	JMH	D.T.
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LAUGHLIN/BULLHEAD INTERNATIONAL AIRPORT

AIRPORT PROPERTY MAP

BULLHEAD CITY, ARIZONA

PLANNED BY: Steven G. Benson P.E.

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APPROVED BY: James M. Harris, P.E.

August 27, 2001

SHEET 8 OF 8

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